Amendments to the Abstract:

Please amend the abstract as shown below.

ABSTRACT OF THE DISCLOSURE

An arithmetic apparatus and an arithmetic method capable of executing arithmetic by reconfigurable hardware, shortening the [a] processing time of arithmetic including conditional branches causing a heavy processing load and improving [a] the processing speed even when conditional branches exist in a loop of performing repeating arithmetic processing, wherein arithmetic processing including conditional branches is divided to first processing of unconditional branches and second processing with conditional branches, the first processing of unconditional branches is assigned to reconfigurable arithmetic means, configuration information of hardware is generated based on the first processing, the first processing is executed by the reconfigured arithmetic means based on the configuration information, the second processing with conditional branches is assigned to a CPU or other arithmetic means, the assigned second processing with conditional branches is executed by the CPU, and a result of the processing is used for correcting [a] the result of said first processing, so that [a] the result of arithmetic processing including conditional branches is obtained.